

Exploration on Extraction of Coalbed Seam in Water Sensitive Reservoir by Combustion of Coal Seams

Authors : Liu Yinga, Bai Xingjiab

Abstract : The conventional way to exploit coalbed methane is to drop reservoirs pressure through drainage, which means that reducing pressure through water drainage for coalbed methane desorption. However, it has many limitations. In this paper, the recovery by conventional way is low, in order to exploit water-sensitive reservoir, combustion of coal seam is proposed to increase recovery ratio, and then theoretical feasibility is elaborated through four aspects: temperature, pressure, superficial area, competitive adsorption, then given an example of water sensitive reservoir, results can be obtained that recovery is effectively improved through combustion of coal seam. At the same time, the suitability and efficiency of combustion of coal seam determine that it can be widely applied.

Keywords : coalbed methane, drainage decompression, water-sensitive, combustion of coal seams, competitive adsorption

Conference Title : ICEED 2016 : International Conference on Energy, Environment and Development

Conference Location : Singapore, Singapore

Conference Dates : March 03-04, 2016